

WHAT IS CLAIMED IS:

1. A method for selectively downloading a file in multiple portions, at least a portion of the file having been previously received, comprising:
- transmitting a request to download a file, the request including an identification of the file and an indication of starting point for transmission of the file;
 - receiving a serial transmission of digital information for the file beginning at the starting point;
 - appending the digital information to the previously-received portion of the file; and
 - storing the received digital information.
2. The method of claim 1 wherein the receiving step includes receiving a stream of bytes.
3. The method of claim 2 wherein the storing step includes storing the received bytes in a temporary folder.
4. The method of claim 2 wherein the transmitting step includes transmitting a start byte number as the indication of the starting point.
5. The method of claim 1, further including providing a visual indication of an amount of the file downloaded.

6. The method of claim 1 wherein the providing step includes displaying an expanding status bar that provides in realtime an indication of the amount of the file downloaded during the receiving step.

7. The method of claim 5, further including providing an indication that the entire file has been downloaded.

8. The method of claim 1, further including selectively installing the file after completion of the downloading.

9. The method of claim 1 wherein the transmitting step includes transmitting a uniform resource locator as the identification of the file.

10. The method of claim 1, further including receiving an end of file indication upon completion of the downloading of the entire file.

11. The method of claim 2, further including tracking numbers of bytes transmitted for the file.

12. The method of claim 1 wherein the transmitting step includes transmitting the indication of the starting point based upon a size of the previously-received portion of the file.

13. The method of claim 1, further including displaying a status of the downloading of the file.

14. The method of claim 13 wherein the displaying step includes displaying in indication that the file is ready to be downloaded, in progress during a download, successfully downloaded, or has a canceled download.

15. The method of claim 13, further including receiving settings for parameters related to control of the downloading of the file.

16. A method for scheduling downloading of a file, comprising:
receiving an identification of a file to be downloaded;
receiving schedule information identifying a time to download the file; and
automatically downloading the file based upon the schedule information.

17. The method of claim 16 wherein the automatically downloading step includes:
transmitting a request to download the file, the request including an identification of the file and an indication of starting point for transmission of the file;
receiving a serial transmission of digital information for the file beginning at the starting point;
appending the digital information to a previously-received portion of the file, if present;
and

storing the received digital information.

18. The method of claim 16 wherein:

the receiving schedule information step includes receiving information specifying a particular date and time; and

the automatically downloading step includes:

detecting occurrence of the particular date and time; and

downloading the file based upon the detecting the occurrence.

19. The method of claim 16 wherein the receiving schedule information step includes receiving information identifying a date and time to download the file.

20. A method for providing updates to files stored on a user's machine, comprising:

scanning a memory associated with a user's machine to detect particular files;

obtaining identifications of the particular files based upon the scanning;

constructing a message including the identifications of the particular files;

transmitting the message to a server; and

receiving from the server an indication of update information associated with the particular files based upon the identification of the particular files.

21. The method of claim 20 wherein:

the obtaining step includes generating application signatures uniquely identifying the particular files; and

the constructing step includes compiling the application signatures into the message.

22. The method of claim 21 wherein the generating step includes compiling as the application signatures for each of the particular files a name of the file and an associated size of the file.

23. A method for scheduling searching for updates to files, comprising:

receiving schedule information identifying a time to request updates to particular files;

and

automatically requesting the updates based upon the schedule information, the step of automatically requesting including:

scanning a memory associated with a user's machine to detect particular files;

obtaining identifications of the particular files based upon the scanning;

constructing a message including the identifications of the particular files;

transmitting the message to a server; and

receiving from the server an indication of update information associated with the particular files based upon the identification of the particular files.

24. The method of claim 23 wherein the receiving step includes receiving an indication of a time to request the updates on a periodic basis.

25. A method for using application signatures in order to uniquely identify files, comprising:
receiving an identification of a particular file;
receiving a size of the particular file;
associating the identification with the size as an application signature for the file; and
transmitting the identification with the size as the application signature for use in
uniquely identifying the file for processing related to the file.

26. The method of claim 25 wherein the receiving the identification step includes receiving a
name for the file.

27. The method of claim 25 wherein the receiving the identification step includes receiving a
name of an executable file related to the file.

28. The method of claim 25 wherein the receiving the identification step includes receiving a
name of a dynamic link library file related to the file.

29. The method of claim 25 wherein the receiving the size step includes receiving a number
of bytes for the file.

30. The method of claim 25 wherein the associating step includes compiling the identification
and the size into a message.

31. The method of claim 25 wherein the transmitting step includes transmitting a request for update information for the file using the application signature.

32. The method of claim 25, further including:

receiving the application signature;

comparing the received application signature with a plurality of particular application signatures; and

transmitting an indication of update information related to the file if the comparing step detects a match between the received application signature and one of the plurality of particular application signatures.

33. The method of claim 32 wherein the comparing step includes individually comparing the identification and the size in the received application signature with file identifications and corresponding file sizes in the plurality of particular application signatures.

34. An apparatus for selectively downloading a file in multiple portions, at least a portion of the file having been previously received, comprising:

a transmission module for transmitting a request to download a file, the request including an identification of the file and an indication of starting point for transmission of the file;

a receive module for receiving a serial transmission of digital information for the file beginning at the starting point;

a module for appending the digital information to the previously-received portion of the

file; and

a store module for storing the received digital information.

35. The apparatus of claim 34 wherein the receive module includes a module for receiving a stream of bytes.

36. The apparatus of claim 35 wherein the store module includes a module for storing the received bytes in a temporary folder.

37. The apparatus of claim 35 wherein the transmission module includes a module for transmitting a start byte number as the indication of the starting point.

38. The apparatus of claim 34, further including a provide module for providing a visual indication of an amount of the file downloaded.

39. The apparatus of claim 34 wherein the provide module includes a module for displaying an expanding status bar that provides in realtime an indication of the amount of the file downloaded during the receiving.

40. The apparatus of claim 38, further including a module for providing an indication that the entire file has been downloaded.

41. The apparatus of claim 34, further including a module for selectively installing the file after completion of the downloading.

42. The apparatus of claim 34 wherein the transmission module includes a module for transmitting a uniform resource locator as the identification of the file.

43. The apparatus of claim 34, further including a module for receiving an end of file indication upon completion of the downloading of the entire file.

44. The apparatus of claim 35, further including a module for tracking numbers of bytes transmitted for the file.

45. The apparatus of claim 34 wherein the transmission module includes a module for transmitting the indication of the starting point based upon a size of the previously-received portion of the file.

46. The apparatus of claim 34, further including a display module for displaying a status of the downloading of the file.

47. The apparatus of claim 46 wherein the display module includes a module for displaying in indication that the file is ready to be downloaded, in progress during a download, successfully downloaded, or has a canceled download.

48. The apparatus of claim 46, further including a module for receiving settings for parameters related to control of the downloading of the file.

49. An apparatus for scheduling downloading of a file, comprising:
a module for receiving an identification of a file to be downloaded;
a module for receiving schedule information identifying a time to download the file; and
a download module for automatically downloading the file based upon the schedule information.

50. The apparatus of claim 49 wherein the download module includes:
a transmission module for transmitting a request to download the file, the request including an identification of the file and an indication of starting point for transmission of the file;
a receive module for receiving a serial transmission of digital information for the file beginning at the starting point;
a module for appending the digital information to a previously-received portion of the file, if present; and
a store module for storing the received digital information.

51. The apparatus of claim 49 wherein:
the module for receiving schedule information includes a module for receiving information specifying a particular date and time; and

the download module includes:

- a module for detecting occurrence of the particular date and time; and
- a module for downloading the file based upon the detecting the occurrence.

52. The apparatus of claim 49 wherein the module for receiving schedule information includes a module for receiving information identifying a date and time to download the file.

53. An apparatus for providing updates to files stored on a user's machine, comprising:

- a scan module for scanning a memory associated with a user's machine to detect particular files;
- a module for obtaining identifications of the particular files based upon the scanning;
- a construction module for constructing a message including the identifications of the particular files;
- a transmission module for transmitting the message to a server; and
- a receive module for receiving from the server an indication of update information associated with the particular files based upon the identification of the particular files.

54. The apparatus of claim 53 wherein:

- the module for obtaining includes a module for generating application signatures uniquely identifying the particular files; and
- the construction module includes a module for compiling the application signatures into the message.

55. The apparatus of claim 54 wherein the module for generating includes a module for compiling as the application signatures for each of the particular files a name of the file and an associated size of the file.

56. An apparatus for scheduling searching for updates to files, comprising:
a receive module for receiving schedule information identifying a time to request updates to particular files; and

a request module for automatically requesting the updates based upon the schedule information, the request module including:

a scan module for scanning a memory associated with a user's machine to detect particular files;

a module for obtaining identifications of the particular files based upon the scanning;

a construction module for constructing a message including the identifications of the particular files;

a transmission module for transmitting the message to a server; and

a receive module for receiving from the server an indication of update information associated with the particular files based upon the identification of the particular files.

57. The apparatus of claim 56 wherein the receive module includes a module for receiving an indication of a time to request the updates on a periodic basis.

58. An apparatus for using application signatures in order to uniquely identify files, comprising:

- an identification module for receiving an identification of a particular file;
- a size module for receiving a size of the particular file;
- a module for associating the identification with the size as an application signature for the file; and
- a transmission module for transmitting the identification with the size as the application signature for use in uniquely identifying the file for processing related to the file.

59. The apparatus of claim 58 wherein the identification module includes a module for receiving a name for the file.

60. The apparatus of claim 58 wherein the identification module includes a module for receiving a name of an executable file related to the file.

61. The apparatus of claim 58 wherein the identification module includes a module for receiving a name of a dynamic link library file related to the file.

62. The apparatus of claim 58 wherein the size module includes a module for receiving a number of bytes for the file.

63. The apparatus of claim 58 wherein the module for associating includes a module for compiling the identification and the size into a message.

64. The apparatus of claim 58 wherein the transmission module includes a module for transmitting a request for update information for the file using the application signature.

65. The apparatus of claim 58, further including:

a module for receiving the application signature;

a compare module for comparing the received application signature with a plurality of particular application signatures; and

a module for transmitting an indication of update information related to the file if the comparing detects a match between the received application signature and one of the plurality of particular application signatures.

66. The apparatus of claim 65 wherein the comparing module includes a module for individually comparing the identification and the size in the received application signature with file identifications and corresponding file sizes in the plurality of particular application signatures.

67. A computer program product, comprising:

a computer-readable medium containing instructions for controlling a computer system to perform a method for selectively downloading a file in multiple portions, at least a portion of the file having been previously received, the method including:

transmitting a request to download a file, the request including an identification of the file and an indication of starting point for transmission of the file;

receiving a serial transmission of digital information for the file beginning at the starting point;

appending the digital information to the previously-received portion of the file; and

storing the received digital information.

68. The computer program product of claim 67 wherein the receiving step includes receiving a stream of bytes.

69. The computer program product of claim 68 wherein the storing step includes storing the received bytes in a temporary folder.

70. The computer program product of claim 68 wherein the transmitting step includes transmitting a start byte number as the indication of the starting point.

71. The computer program product of claim 67, further including providing a visual indication of an amount of the file downloaded.

72. The computer program product of claim 67 wherein the providing step includes displaying an expanding status bar that provides in realtime an indication of the amount of the file downloaded during the receiving step.

73. The computer program product of claim 71, further including providing an indication that the entire file has been downloaded.

74. The computer program product of claim 67, further including selectively installing the file after completion of the downloading.

75. The computer program product of claim 67 wherein the transmitting step includes transmitting a uniform resource locator as the identification of the file.

76. The computer program product of claim 67, further including receiving an end of file indication upon completion of the downloading of the entire file.

77. The computer program product of claim 68, further including tracking numbers of bytes transmitted for the file.

78. The computer program product of claim 67 wherein the transmitting step includes transmitting the indication of the starting point based upon a size of the previously-received portion of the file.

79. The computer program product of claim 67, further including displaying a status of the downloading of the file.

80. The computer program product of claim 79 wherein the displaying step includes displaying in indication that the file is ready to be downloaded, in progress during a download, successfully downloaded, or has a canceled download.

81. The computer program product of claim 80, further including receiving settings for parameters related to control of the downloading of the file.

82. A computer program product, comprising:

a computer-readable medium containing instructions for controlling a computer system to perform a method for scheduling downloading of a file, the method including:

receiving an identification of a file to be downloaded;

receiving schedule information identifying a time to download the file; and

automatically downloading the file based upon the schedule information.

83. The computer program product of claim 82 wherein the automatically downloading step includes:

transmitting a request to download the file, the request including an identification of the file and an indication of starting point for transmission of the file;

receiving a serial transmission of digital information for the file beginning at the starting point;
appending the digital information to a previously-received portion of the file, if present;
and
storing the received digital information.

84. The computer program product of claim 82 wherein:

the receiving schedule information step includes receiving information specifying a particular date and time; and

the automatically downloading step includes:

detecting occurrence of the particular date and time; and

downloading the file based upon the detecting the occurrence.

85. The computer program product of claim 82 wherein the receiving schedule information step includes receiving information identifying a date and time to download the file.

86. A computer program product, comprising:

a computer-readable medium containing instructions for controlling a computer system to perform a method for providing updates to files stored on a user's machine, the method including:

scanning a memory associated with a user's machine to detect particular files;

obtaining identifications of the particular files based upon the scanning;

constructing a message including the identifications of the particular files;

transmitting the message to a server; and
receiving from the server an indication of update information associated with the
particular files based upon the identification of the particular files.

87. The computer program product of claim 86 wherein:
the obtaining step includes generating application signatures uniquely identifying the
particular files; and
the constructing step includes compiling the application signatures into the message.

88. The computer program product of claim 87 wherein the generating step includes
compiling as the application signatures for each of the particular files a name of the file and an
associated size of the file.

89. A computer program product, comprising:
a computer-readable medium containing instructions for controlling a computer system to
perform a method for scheduling searching for updates to files, the method including:
receiving schedule information identifying a time to request updates to particular files;
and
automatically requesting the updates based upon the schedule information, the step of
automatically requesting including:
scanning a memory associated with a user's machine to detect particular files;
obtaining identifications of the particular files based upon the scanning;

constructing a message including the identifications of the particular files;
transmitting the message to a server; and
receiving from the server an indication of update information associated with the particular files based upon the identification of the particular files.

90. The computer program product of claim 89 wherein the receiving step includes receiving an indication of a time to request the updates on a periodic basis.

91. A computer program product, comprising:
a computer-readable medium containing instructions for controlling a computer system to perform a method for using application signatures in order to uniquely identify files, the method including:

receiving an identification of a particular file;
receiving a size of the particular file;
associating the identification with the size as an application signature for the file; and
transmitting the identification with the size as the application signature for use in uniquely identifying the file for processing related to the file.

92. The computer program product of claim 91 wherein the receiving the identification step includes receiving a name for the file.

93. The computer program product of claim 91 wherein the receiving the identification step includes receiving a name of an executable file related to the file.

94. The computer program product of claim 91 wherein the receiving the identification step includes receiving a name of a dynamic link library file related to the file.

95. The computer program product of claim 91 wherein the receiving the size step includes receiving a number of bytes for the file.

96. The computer program product of claim 91 wherein the associating step includes compiling the identification and the size into a message.

97. The computer program product of claim 91 wherein the transmitting step includes transmitting a request for update information for the file using the application signature.

98. The computer program product of claim 91, further including:

receiving the application signature;

comparing the received application signature with a plurality of particular application signatures; and

transmitting an indication of update information related to the file if the comparing step detects a match between the received application signature and one of the plurality of particular application signatures.

99. The computer program product of claim 98 wherein the comparing step includes individually comparing the identification and the size in the received application signature with file identifications and corresponding file sizes in the plurality of particular application signatures.

100. A screen for use in electronically displaying information related to downloading files, comprising:

- a screen for display on a display device;
- an information section in the screen for displaying information related to downloading files; and
- a download section in the screen for selection by a user to access functions related to downloading files.

101. The screen of claim 100, further including an updates section in the screen for selection by a user to access functions related to obtaining update information for the files.

102. The screen of claim 100, further including:

- a news section in the screen for selection by a user to access information related to files available for downloading;
- a shopping section in the screen for selection by a user to access on-line shopping;
- a customer service section in the screen for selection by a user to access information concerning customer service support related to downloading files;

a privacy section in the screen for selection by a user to access information related to privacy of information used in downloading files; and

a tour section in the screen for selection by a user to access information related to operation of downloading files.

103. The screen of claim 100, further including a banner section for displaying an advertisement.

104. The screen of claim 100, further including a settings section for selection by a user in order to access a settings screen for use in receiving information for parameters related to downloading files.

105. The screen of claim 100, further including a downloads screen, displayed upon selection of the download section, for use in receiving commands and displaying status information related to downloading files.

106. The screen of claim 105, further including a downloads status section for displaying the status information, the downloads status section displaying identifications for a plurality of a files and indications of a status for each of the files.

107. The screen of claim 106 wherein the download status section includes a section for displaying, as the indications of the status, a ready status, a downloaded status, an in progress status, or a canceled status.

108. The screen of claim 105 wherein the downloads screen includes a download section for selection by a user to initiate downloading of a particular file.

109. The screen of claim 105 wherein the downloads screen includes an install section for selection by a user to initiate installation of a particular downloaded file.

110. The screen of claim 105 wherein the downloads screen includes a remove section for selection by a user to remove a particular file.

111. The screen of claim 105 wherein the downloads screen includes a schedule section for selection by a user to schedule downloading of a particular file.

112. The screen of claim 111, further including a schedule downloads screen, displayed upon selection of the schedule section, for receiving schedule information used to automatically download the particular file at a particular time.

113. The screen of claim 112 wherein the schedule downloads screen includes for receiving the schedule information a date section for receiving date information and a time section for receiving time information.

114. The screen of claim 100, further including a status screen for displaying status of downloading of a file while the downloading is in progress.

115. The screen of claim 100 wherein the status screen includes a section for indicating a relative amount of the file downloading while the downloading is in progress.

116. The screen of claim 101, further including updates screen, displayed upon selection of the updates section, for use in receiving commands and displaying status information related to updates for files.

117. The screen of claim 116, further including a find updates section for selection by a user in order to initiate a search for updates to files.

118. The screen of claim 116, further including an update status section for displaying status information related to updates.

119. The screen of claim 118 wherein the update status section includes a section for displaying, as indications of the status information, an identification of a file and an identification of an update for the file.

120. The screen of claim 119 wherein the update status section includes the section for displaying, as the indications of the status information, an identification of a price for the update and an identification of a type of the update.

121. The screen of claim 117, further including an update status screen, displayed upon selection of the find updates section, for displaying status of the search for updates while the search is in progress.

122. A method for selectively downloading a file in multiple portions, comprising:
downloading a first portion of the file;
subsequently transmitting a request to continue downloading the file;
downloading a second portion of the file; and
appending the first portion of the file to the second portion of the file.